



EU Policy perspective on smart energy and efficiency

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CLEAN ENERGY FOR ALL EUROPEANS PACKAGE

“ENERGY EFFICIENCY FIRST”



Energy Union Governance



Energy Efficiency
(Energy Efficiency Directive, European Performance of Buildings Directive)



Renewables
(Revised Renewable Energy Directive)



New Electricity Market Design
(including Risk Preparedness)



Energy prices and costs report



Energy Efficiency Directive

- 32.5% energy efficiency target for 2030;



Ecodesign Working Plan 2016-2019

- List of new product groups;
- Contribution to circular economy objectives;



Energy Performance of Buildings

- Supportive of renovation;
- Smarter – ICT, smart buildings;
- Simpler;

ENERGY EFFICIENCY FINANCING

A SIGNIFICANT INVESTMENT GAP

<i>Investment expenditures in billion EUR'10 (average annual 2021-30)</i>		REF2016 (BAU)	EUCO30	EUCO35	Financing challenge (EUCO30)	Financing challenge (EUCO35)
Demand side	Industry	15	19	29	4	14
	Buildings - households	127	214	337	87	210
	Buildings - tertiary	23	68	157	45	134
	Transport	705	736	733	31	28
Supply side	Grid	34	36	31	2	-3
	Generation and industrial boilers	33	42	37	9	4
TOTAL		937	1115		178	387

ENERGY EFFICIENCY FINANCING

SMART FINANCE FOR SMART BUILDINGS

More effective use of public funds

- Deploying **Financial Instruments** and flexible energy efficiency and renewable financing platforms
- Building on EFSI blending with ESIF funds



Assistance and aggregation

- Supporting the project pipeline at EU and local level
- **Project Development Assistance** facilities
- "One-stop-shops"



De-risking

- **Understanding the risks and benefits** for financiers and investors
- The De-risking Energy Efficiency Platform
- Commonly accepted underwriting framework



ENERGY EFFICIENCY AND SMARTNESS

A COMPLEMENTARY SET OF POLICY ACTIONS



Energy Efficiency Directive

Remotely readable meters and heat cost allocators for heating, cooling and hot water

Consumer information, metering



Ecodesign Working Plan 2016-2019

Control capabilities of products;

Energy smart appliances;

Building Automation and Control Systems (BACS)

Smart and efficient energy-consuming products



Energy Performance of Buildings

Requirements on the installation of control devices, including BACS;

Requirements on electromobility infrastructure;

Smart Readiness Indicator

Smart buildings

SMART READINESS INDICATOR FOR BUILDINGS

AN EU LABEL FOR SMART BUILDINGS

- ✔ “An optional common Union scheme for rating the smart readiness of buildings”
- ✔ “(...) The rating shall be based on an assessment of the capabilities of a building or building unit to **adapt its operation to the needs of the occupant and the grid** and to **improve its energy efficiency and overall performance (...)**”

Article 8(10) of the revised EPBD.



vito ECOFYS Waide Strategic Efficiency OFFIS

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Smart Readiness Indicator - SRI

Measure the technological readiness of your building



1 Readiness to adapt in response to the needs of the occupant



2 Readiness to facilitate maintenance and efficient operation



3 Readiness to adapt in response to the situation of the energy grid



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Thank you

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<https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings>